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=> s stylus or pen
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7856 STYLUS

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L1 21831 STYLUS OR PEN

=> s calculat? or arithmetic### or mathematic### or equation#

260919 CALCULAT?

26633 ARITHMETIC###

25785 MATHEMATIC###

131026 EQUATION#

L2 337899 CALCULAT? OR ARITHMETIC### OR MATHEMATIC### OR EQUATION#

=> s slate or penman

**2116 SLATE** 

26 PENMAN

L3 2142 SLATE OR PENMAN

=> s 11 and 12

L4 6446 L1 AND L2

=> s trac###

L5 249887 TRAC###

=> s 14 and 15

L6 2633 L4 AND L5

=> s handwriting or handwritten or script#

846 HANDWRITING

1056 HANDWRITTEN

1566 SCRIPT#

L7 3079 HANDWRITING OR HANDWRITTEN OR SCRIPT#

=> s 16 and 17

L8 145 L6 AND L7

=> s display###(p)12

198191 DISPLAY###

L9 23872 DISPLAY###(P)L2

=> s 11 and 19

L10 1274 L1 AND L9

=> s 110 and 17

L11 101 L10 AND L7

=> s digitizer# or digitiser#

3539 DIGITIZER#

82 DIGITISER#

L12 3610 DIGITIZER# OR DIGITISER#

=> s l11 and l12

L13 23 L11 AND L12

3

12-05-94 01:25pm

=> d l13 1-23

- 5,347,589, Sep. 13, 1994, System and method for displaying handwriting parameters for handwriting verification; M. Littleton Meeks, et al., 382/3; 178/18; 345/179; 382/13 [IMAGE AVAILABLE]
- 5,339,392, Aug. 16, 1994, Apparatus and method for creation of a user definable video displayed document showing changes in real time data; Jeffrey S. Risberg, et al., 395/161; 364/408; 395/155 [IMAGE AVAILABLE]
- 3. 5,308,936, May 3, 1994, Ultrasonic pen-type data input device; Michael P. Biggs, et al., 178/18, 19; 382/3 [IMAGE AVAILABLE]
- 4. 5,297,216, Mar. 22, 1994, Handwritten keyboardless entry computer system; Ralph Sklarew, 382/13, 59 [IMAGE AVAILABLE]
- 5. 5,295,064, Mar. 15, 1994, Intelligent shopping cart system having cart position determining and service queue position securing capability; John Malec, et al., 364/401; 340/825.35 [IMAGE AVAILABLE]
- 6. 5,294,792, Mar. 15, 1994, Writing tip position sensing and processing apparatus; Russell F. Lewis, et al., 250/221, 226; 345/163, 180; 382/13 [IMAGE AVAILABLE]
- 7. 5,287,266, Feb. 15, 1994, Intelligent shopping cart system having cart position determining capability; John Malec, et al., 364/401; 340/825.49 [IMAGE AVAILABLE]
- 8. RE 34,476, Dec. 14, 1993, Hybrid information management system for

handwriting and text; Donald D. Norwood, 382/13; 345/119, 173; 364/705.03, 705.06 [IMAGE AVAILABLE]

- 9. 5,233,331, Aug. 3, 1993, Inking buffer for flat-panel display controllers; Liam D. Comerford, et al., 345/3; 178/18; 345/119, 200 [IMAGE AVAILABLE]
- 10. 5,195,133, Mar. 16, 1993, Apparatus and method for producing a digitized transaction record including an encrypted signature; Michael A. Kapp, et al., 380/9; 235/379, 380; 380/22, 23, 43, 49, 55; 382/3 [IMAGE AVAILABLE]
- 5,115,107, May 19, 1992, Method of correcting skew between a digitizer and a digital display; John F. Crooks, et al., 178/18; 345/178; 364/405; 382/45 [IMAGE AVAILABLE]
- 12. 5,063,600, Nov. 5, 1991, Hybrid information management system for handwriting and text; Donald D. Norwood, 382/13; 345/145, 173; 364/705.03, 705.06; 382/59 [IMAGE AVAILABLE]
- 13. 4,973,952, Nov. 27, 1990, Shopping cart display system; John Malec, et al., 340/825.35; 186/62; 340/825.49; 364/400 [IMAGE AVAILABLE]
- 14. 4,885,694, Dec. 5, 1989, Automated building control design system; Robert H. Pray, et al., 364/464.01, 188, 512; 395/155, 156 [IMAGE AVAILABLE]
- 4,833,312, May 23, 1989, System for transactions between financial institutions and customers; Nobuo Minematsu, et al., 235/379, 380 [IMAGE

# 12-0

#### AVAILABLE]

- 16. 4,817,034, Mar. 28, 1989, Computerized handwriting duplication system; William F. Hardin, Sr., et al., 380/2; 178/18; 345/173; 364/918.7, 919, 919.1, 920.7, 927.1, 927.2, 927.6, 927.61, 929.3, 940.81, 943, 943.5, 951.1, 951.3, 974, DIG.2; 380/13; 382/2, 13 [IMAGE AVAILABLE]
- 17. 4,771,469, Sep. 13, 1988, Means and method of representing an object shape by hierarchical boundary decomposition; Timothy M. Wittenburg, 382/25, 6 [IMAGE AVAILABLE]
- 18. 4,730,186, Mar. 8, 1988, Input integrated flat panel display system; Kazuyoshi Koga, et al., 345/179; 178/18; 345/123, 127, 182 [IMAGE AVAILABLE]
- 19. 4,723,836, Feb. 9, 1988, Handwritten character input device; Yoshio Kono, et al., 359/63; 345/104, 174, 179; 359/70, 82, 85 [IMAGE AVAILABLE]
- 20. 4,639,879, Jan. 27, 1987, Method and device for light emitting intensity control in a graphic display device; Hiromi Chaya, 345/20, 147, 200 [IMAGE AVAILABLE]
- 21. 4,633,436, Dec. 30, 1986, Real-time rub-out erase for an electronic handwriting facility; Gregory A. Flurry, 345/179; 273/DIG.28; 345/146; 364/927.1, 927.2, 927.61, 927.66, 933.8, 936.1, 943, 943.1, 948.11, 948.2, 949.3, DIG.2; 434/162 [IMAGE AVAILABLE]
- 22. 4,578,811, Mar. 25, 1986, Key-in device; Naoki Inagaki, 382/11, 13, 24 [IMAGE AVAILABLE]
- 23. 4,551,810, Nov. 5, 1985, Method and apparatus for designing duct work and for producing patterns for conduit sections in the designed duct work; Richard W. Levine, 364/474.24, 191, 474.05, 474.09, 474.13, 474.25, 512 [IMAGE AVAILABLE]

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(FILE 'USPAT' ENTERED AT 13:09:54 ON 05 DEC 94) SET PAGELENGTH 62 SET LINELENGTH 78 L1 21831 S STYLUS OR PEN 337899 S CALCULAT? OR ARITHMETIC### OR MATHEMATIC### OR EQUATION# **L.2** L3 2142 S SLATE OR PENMAN L4 6446 S L1 AND L2 L5 249887 S TRAC### 2633 S L4 AND L5 L6 L7 3079 S HANDWRITING OR HANDWRITTEN OR SCRIPT# L8 145 S L6 AND L7 L9 23872 S DISPLAY###(P) L2 L10 1274 S L1 AND L9 L11 101 S L10 AND L7 L12 3610 S DIGITIZER# OR DIGITISER# L13 23 S L11 AND L12 => s 111 and 15

61 L11 AND L5

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=> s 117 and 17 L18 61 L17 AND L7

=> d l19 1-15

- 1. 5,347,589, Sep. 13, 1994, System and method for displaying handwriting parameters for handwriting verification; M. Littleton Meeks, et al., 382/3; 178/18; 345/179; 382/13 [IMAGE AVAILABLE]
- 2. 5,339,392, Aug. 16, 1994, Apparatus and method for creation of a user definable video displayed document showing changes in real time data; Jeffrey S. Risberg, et al., 395/161; 364/408; 395/155 [IMAGE AVAILABLE]
- 3. 5,297,216, Mar. 22, 1994, Handwritten keyboardless entry computer system; Ralph Sklarew, 382/13, 59 [IMAGE AVAILABLE]
- 4. 5,295,064, Mar. 15, 1994, Intelligent shopping cart system having cart position determining and service queue position securing capability; John Malec, et al., 364/401; 340/825.35 [IMAGE AVAILABLE]
- 5. 5,294,792, Mar. 15, 1994, Writing tip position sensing and processing apparatus; Russell F. Lewis, et al., 250/221, 226; 345/163, 180; 382/13 [IMAGE AVAILABLE]
- 6. 5,287,266, Feb. 15, 1994, Intelligent shopping cart system having cart position determining capability; John Malec, et al., 364/401; 340/825.49

## [IMAGE AVAILABLE]

- 7. RE 34,476, Dec. 14, 1993, Hybrid information management system for handwriting and text; Donald D. Norwood, 382/13; 345/119, 173; 364/705.03, 705.06 [IMAGE AVAILABLE]
- 8. 5,233,331, Aug. 3, 1993, Inking buffer for flat-panel display controllers; Liam D. Comerford, et al., 345/3; 178/18; 345/119, 200 [IMAGE AVAILABLE]
- 9. 5,195,133, Mar. 16, 1993, Apparatus and method for producing a digitized transaction record including an encrypted signature; Michael A. Kapp, et al., 380/9; 235/379, 380; 380/22, 23, 43, 49, 55; 382/3 [IMAGE AVAILABLE]
- 10. 5,115,107, May 19, 1992, Method of correcting skew between a digitizer and a digital display; John F. Crooks, et al., 178/18; 345/178; 364/405; 382/45 [IMAGE AVAILABLE]
- 11. 5,063,600, Nov. 5, 1991, Hybrid information management system for

handwriting and text; Donald D. Norwood, 382/13; 345/145, 173; 364/705.03, 705.06; 382/59 [IMAGE AVAILABLE]

- 12. 4,973,952, Nov. 27, 1990, Shopping cart display system; John Malec, et al., 340/825.35; 186/62; 340/825.49; 364/400 [IMAGE AVAILABLE]
- 13. 4,817,034, Mar. 28, 1989, Computerized handwriting duplication system; William F. Hardin, Sr., et al., 380/2; 178/18; 345/173; 364/918.7, 919, 919.1, 920.7, 927.1, 927.2, 927.6, 927.61, 929.3, 940.81, 943, 943.5, 951.1, 951.3, 974, DIG.2; 380/13; 382/2, 13 [IMAGE AVAILABLE]
- 14. 4,771,469, Sep. 13, 1988, Means and method of representing an object shape by hierarchical boundary decomposition; Timothy M. Wittenburg, 382/25, 6 [IMAGE AVAILABLE]
- 15. 4,578,811, Mar. 25, 1986, Key-in device; Naoki Inagaki, 382/11, 13, 24 [IMAGE AVAILABLE]
- => d l14 1-61
- 1. 5,365,598, Nov. 15, 1994, Handwritten keyboardless entry computer system; Ralph Sklarew, 382/13; 178/18; 382/59 [IMAGE AVAILABLE]
- 2. 5,349,139, Sep. 20, 1994, Architecture for communication of remote devices to a digitizing display; Guy F. Verrier, et al., 178/19; 345/158, 179 [IMAGE AVAILABLE]
- 3. 5,347,589, Sep. 13, 1994, System and method for displaying handwriting parameters for handwriting verification; M. Littleton Meeks, et al., 382/3; 178/18; 345/179; 382/13 [IMAGE AVAILABLE]
- 4. 5,339,392, Aug. 16, 1994, Apparatus and method for creation of a user definable video displayed document showing changes in real time data; Jeffrey S. Risberg, et al., 395/161; 364/408; 395/155 [IMAGE AVAILABLE]
- 5. 5,317,502, May 31, 1994, High resolution system for sensing spatial coordinates; Leonard Reiffel, et al., 364/167.01; 178/19 [IMAGE AVAILABLE]
- 6. 5,309,555, May 3, 1994, Realtime communication of hand drawn images in a multiprogramming window environment; Anthony S. Akins, et al., 395/157, 153, 155, 163 [IMAGE AVAILABLE]
- 7. 5,297,216, Mar. 22, 1994, Handwritten keyboardless entry computer system; Ralph Sklarew, 382/13, 59 [IMAGE AVAILABLE]
- 8. 5,295,238, Mar. 15, 1994, System, method, and font for printing cursive character strings; Nathan A. Dickson, 395/150, 145 [IMAGE AVAILABLE]
- 9. 5,295,064, Mar. 15, 1994, Intelligent shopping cart system having cart position determining and service queue position securing capability; John Malec, et al., 364/401; 340/825.35 [IMAGE AVAILABLE]
- 10. 5,294,792, Mar. 15, 1994, Writing tip position sensing and processing apparatus; Russell F. Lewis, et al., 250/221, 226; 345/163, 180; 382/13 [IMAGE AVAILABLE]

- 11. 5,287,417, Feb. 15, 1994, Method and system for recognizing a graphic object's shape, line style, and fill pattern in a pen environment; Marlin Eller, et al., 382/41, 9, 22, 44; 395/133, 137 [IMAGE AVAILABLE]
- 12. 5,287,266, Feb. 15, 1994, Intelligent shopping cart system having cart position determining capability; John Malec, et al., 364/401; 340/825.49 [IMAGE AVAILABLE]
- RE 34,476, Dec. 14, 1993, Hybrid information management system for handwriting and text; Donald D. Norwood, 382/13; 345/119, 173; 364/705.03, 705.06 [IMAGE AVAILABLE]
- 14. 5,265,247, Nov. 23, 1993, Laboratory data storage and retrieval system and method; Lynn K. Wienck, et al., 395/600; 364/172, 221, 221.7, 222.81, 227.4, 231, 234, 235, 236.8, 237.2, 237.3, 237.7, 240, 241.9, 261, 282.1, 286, 286.1, 286.2, 420, 422, DIG.1; 366/6, 8 [IMAGE AVAILABLE]
- 15. 5,258,935, Nov. 2, 1993, Self-inputting checkbook accounting device; Michael J. Ure, 364/705.02, 705.03, 709.11 [IMAGE AVAILABLE]
- 16. 5,251,123, Oct. 5, 1993, High resolution system for sensing spatial coordinates; Leonard Reiffel, et al., 364/167.01; 178/19; 345/179 [IMAGE AVAILABLE]
- 17. 5,244,235, Sep. 14, 1993, Machine readable document and method for forming same; James E. Helgeson, 283/116, 58, 70, 904 [IMAGE AVAILABLE]
- 5,237,651, Aug. 17, 1993, Electronic personal organizer; Stephen Randall, 395/148; 345/146, 179; 395/155, 157; D14/100 [IMAGE AVAILABLE]
- 19. 5,233,331, Aug. 3, 1993, Inking buffer for flat-panel display controllers; Liam D. Comerford, et al., 345/3; 178/18; 345/119, 200 [IMAGE AVAILABLE]
- 5,226,091, Jul. 6, 1993, Method and apparatus for capturing information in drawing or writing; David N. L. Howell, et al., 382/3, 13, 56 [IMAGE AVAILABLE]
- 21. 5,195,133, Mar. 16, 1993, Apparatus and method for producing a digitized transaction record including an encrypted signature; Michael A. Kapp, et al., 380/9; 235/379, 380; 380/22, 23, 43, 49, 55; 382/3 [IMAGE AVAILABLE]
- 22. 5,194,852, Mar. 16, 1993, Electro-optic slate for direct entry and display and/or storage of hand-entered textual and graphic information; Edward S. More, et al., 345/182; 178/19; 341/5, 33; 345/173, 902 [IMAGE AVAILABLE]
- 5,176,520, Jan. 5, 1993, Computer assisted instructional delivery system and method; Eric R. Hamilton, 434/350; 273/434; 348/13; 379/96; 395/927; 434/307R, 323, 365 [IMAGE AVAILABLE]
- 24. 5,174,759, Dec. 29, 1992, TV animation interactively controlled by the viewer through input above a book page; Frank S. Preston, et al., 434/317; 364/410; 434/307R, 335 [IMAGE AVAILABLE]
- 25. 5,157,737, Oct. 20, 1992, Handwritten keyboardless entry computer

system; Ralph Sklarew, 382/13; 178/18; 382/59 [IMAGE AVAILABLE]

- 26. 5,133,076, Jul. 21, 1992, Hand held computer; Jeff C. Hawkins, et al., 395/800; 364/231, 231.1, 231.2, 709.09 [IMAGE AVAILABLE]
- 27. 5,115,107, May 19, 1992, Method of correcting skew between a digitizer and a digital display; John F. Crooks, et al., 178/18; 345/178; 364/405; 382/45 [IMAGE AVAILABLE]
- 28. 5,107,541, Apr. 21, 1992, Method and apparatus for capturing information in drawing or writing; Colin S. Hilton, 382/3; 178/18; 382/13, 59, 65 [IMAGE AVAILABLE]
- 29. 5,067,573, Nov. 26, 1991, Hand-writing input apparatus; Hiroshi Uchida, 178/18; 382/69; D14/100 [IMAGE AVAILABLE]
- 30. 5,065,345, Nov. 12, 1991, Interactive audiovisual control mechanism; Lance Knowles, et al., 395/154; 434/308, 323 [IMAGE AVAILABLE]
- 31. 5,063,600, Nov. 5, 1991, Hybrid information management system for handwriting and text; Donald D. Norwood, 382/13; 345/145, 173; 364/705.03, 705.06; 382/59 [IMAGE AVAILABLE]
- 32. 5,012,349, Apr. 30, 1991, Method and portable device for detection, storage and for eventual processing and reproduction of graphic symbols appearing on any type of carrier; Stefan G. de Fay, 358/296; 346/143; 358/473; 382/59 [IMAGE AVAILABLE]
- 33. 5,008,821, Apr. 16, 1991, Computerized process and system for assigning and delivering feed to animals in a feedlot; William C. Pratt, et al., 364/413.01; 119/51.01, 51.02 [IMAGE AVAILABLE]
- 34. 4,980,840, Dec. 25, 1990, Computerized editing and composing system; Bujiu Yin, et al., 395/150; 345/112; 395/151 [IMAGE AVAILABLE]
- 35. 4,973,952, Nov. 27, 1990, Shopping cart display system; John Malec, et al., 340/825.35; 186/62; 340/825.49; 364/400 [IMAGE AVAILABLE]
- 36. 4,972,496, Nov. 20, 1990, Handwritten keyboardless entry computer system; Ralph Sklarew, 382/13; 178/18; 345/901; 382/57, 59; D14/100 [IMAGE AVAILABLE]
- 37. 4,947,302, Aug. 7, 1990, Improvements to control systems for variable parameter lighting fixtures; Michael Callahan, 362/233; 315/312; 362/268, 277, 319 [IMAGE AVAILABLE]
- 38. 4,945,476, Jul. 31, 1990, Interactive system and method for creating and editing a knowledge base for use as a computerized aid to the cognitive process of diagnosis; Neil Bodick, et al., 364/413.02, 223, 224.5, 248.1, 260.4, 260.6, 274, 274.2, 274.3, 275.1, 275.2, 275.7, 282.1, 286, 286.1, 413.13; 395/12, 75, 76, 924 [IMAGE AVAILABLE]
- 39. 4,918,262, Apr. 17, 1990, Touch sensing display screen signal processing apparatus and method; Dale R. Flowers, et al., 178/18; 345/173 [IMAGE AVAILABLE]

- 40. 4,901,358, Feb. 13, 1990, Method of comparing a handwriting with a reference writing; Louis Bechet, 382/3, 13 [IMAGE AVAILABLE]
- 41. 4,899,137, Feb. 6, 1990, Arrangement for the input and processing of characters and/or graphic patterns; Herbert Behrens, et al., 345/168; 178/18; 341/5; 345/173 [IMAGE AVAILABLE]
- 42. 4,894,760, Jan. 16, 1990, Additive color-mixing light fixture employing a single moveable multi-filter array; Michael Callahan, 362/293; 359/889, 891; 362/277, 319 [IMAGE AVAILABLE]
- 43. 4,817,034, Mar. 28, 1989, Computerized handwriting duplication system; William F. Hardin, Sr., et al., 380/2; 178/18; 345/173; 364/918.7, 919, 919.1, 920.7, 927.1, 927.2, 927.6, 927.61, 929.3, 940.81, 943, 943.5, 951.1, 951.3, 974, DIG.2; 380/13; 382/2, 13 [IMAGE AVAILABLE]
- 44. 4,777,651, Oct. 11, 1988, Method of pixel to vector conversion in an automatic picture coding system; Benjamin E. McCann, et al., 382/21, 56 [IMAGE AVAILABLE]
- 45. 4,771,469, Sep. 13, 1988, Means and method of representing an object shape by hierarchical boundary decomposition; Timothy M. Wittenburg, 382/25, 6 [IMAGE AVAILABLE]
- 46. 4,771,268, Sep. 13, 1988, Character recognition device; Hironao Sone, et al., 341/22, 5; 382/10 [IMAGE AVAILABLE]
- 47. 4,763,356, Aug. 9, 1988, Touch screen form entry system; Benjamin W. Day, Jr., et al., 379/368; 178/18; 345/113, 173, 902; 364/DIG.2; 379/201, 396; 395/100, 149, 155, 161 [IMAGE AVAILABLE]
- 48. 4,718,094, Jan. 5, 1988, Speech recognition system; Lalit R. Bahl, et al., 381/43; 395/2.49, 2.6, 2.61, 2.64, 2.65 [IMAGE AVAILABLE]
- 49. 4,710,877, Dec. 1, 1987, Device for the programmed teaching of arabic language and recitations; Moustafa E. Ahmed, 364/419.01, 920.1, 926, 927, 927.61, 927.92, 948.2, 948.21, 948.22, DIG.2; 434/157 [IMAGE AVAILABLE]
- 50. 4,700,181, Oct. 13, 1987, Graphics display system; Stephen Maine, et al., 345/201, 139 [IMAGE AVAILABLE]
- 51. 4,672,457, Jun. 9, 1987, Scanner system; Gilbert P. Hyatt, 348/761, 748, 751 [IMAGE AVAILABLE]
- 52. 4,665,282, May 12, 1987, Tablet type coordinate input apparatus using elastic wave; Ichiya Sato, et al., 178/18; 345/179 [IMAGE AVAILABLE]
- 53. 4,653,107, Mar. 24, 1987, On-line recognition method and apparatus for a handwritten pattern; Hiroshi Shojima, et al., 382/13, 3, 22 [IMAGE AVAILABLE]
- 54. 4,644,352, Feb. 17, 1987, Radio wave data transmission watch device; Hiroshi Fujii, 340/825.44, 825.55, 825.69; 345/173; 455/100, 115; 968/896, DIG.1 [IMAGE AVAILABLE]
- 55. 4,578,811, Mar. 25, 1986, Key-in device; Naoki Inagaki, 382/11, 13, 24

[IMAGE AVAILABLE]

- 12-05-94 01:25pm
- 4,523,235, Jun. 11, 1985, Electronic microcopier apparatus; Jan Rajchman, 358/472; 346/76PH; 358/473; 382/59; 400/29, 73, 88 [IMAGE AVAILABLE]
- 4,353,555, Oct. 12, 1982, Duplicate bridge scoring system; Frederick H. Flam, 273/148R, 151 [IMAGE AVAILABLE]
- 58. 4,335,303, Jun. 15, 1982, Method for collecting market survey data from universal product type coded items; James Call, 235/463, 454; 346/107R; 355/1 [IMAGE AVAILABLE]
- 4,290,688, Sep. 22, 1981, Apparatus for collecting market survey data from universal product type coded items; James Call, 355/1; 346/107R; 354/106 [IMAGE AVAILABLE]
- 60. 4,112,415, Sep. 5, 1978, System for optically entering, displaying and decoding handwritten symbols; Johan O. Hilbrink, 382/13; 364/926.1, 926.5, 926.8, 92<del>7.2, 927.4,</del> 927.6, 929, 929.1, 930, 931, 931.1, 932, 932.5, 932.6, 933, 933.3, 933.7, 934, 934.1, 936, 941, 941.1, 942.7, 946.2, 946.6, 947, 947.2, 950, 950.3, 959.1, 959.4, 965, 965.4, 965.5, DIG.2; 382/43; 395/100 [IMAGE AVAILABLE]
- 61. 4,081,791, Mar. 28, 1978, Methods and apparatus for making writing legible by a machine for recognizing shapes; Jean Pollard, et al., 382/11; 235/487; 382/18, 69 [IMAGE AVAILABLE]

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S4
        35194
                DIGITIS? OR DIGITIZ?
S5
       249395 TRACE? OR TRACING
S6
         6746
                HANDWRIT? OR HAND(W) (WRITE? OR WRITING OR WRITTEN)
S7
           82
                S1 (S) S3
S8
          290
                S1(S)(S4 OR S5 OR S6)
S9
            9
                S7 AND S8
S10
            8
                RD (unique items)
?t 10/7/1-8
 10/7/1
            (Item 1 from file: 351)
DIALOG(R) File 351: DERWENT WPI
(c) 1994 Derwent Info Ltd. All rts. reserv.
009967190 WPI Acc No: 94-234903/28
Related WPI Accession(s): 94-234904
XRPX Acc No: N94-185638
                    <u>handwritten</u> input <u>calculator</u> - has electronic
      Pen -based,
    input surface which user writes calculations with stylus
    calculate mathematical calculations
Patent Assignee: (MORG/) MORGAN M W
Author (Inventor): MORGAN M W
Number of Patents: 001
Number of Countries: 018
Patent Family:
    CC Number
                 Kind
                          Date
                                    Week
    WO 9415271
                                      9428
                    A1
                           940707
                                              (Basic)
Priority Data (CC No Date): US 994950 (921222)
Applications (CC, No, Date): WO 93US10521 (931102)
```

Language: English
EP and/or WO Cited Patents: US 4141073; US 4151596; US 4578811

EP and/or WO Cited Patents: US 4141073; US 4151596; US Designated States

(National): CA; JP

(Regional): AT; BE; CH; DE; DK; ES; FR; GB; GR; IE; IT; LU; MC; NL; PT; SE Abstract (Basic): WO 9415271 A

The <u>calculator</u> recognises <u>handwritten</u> inputs in which the inputs include mathematical operators and operands. Calculations are performed by the <u>calculator</u> indicated by the mathematical operators and operands.

The <u>calculator</u> comprises an electronic input surface, a <u>stylus</u> for <u>tracing</u> on the electronic input surface and a processing circuit. The processing circuit is coupled to the electronic input surface for recording and recognising the movements of the <u>stylus</u>. The processing circuit also converts the characters into mathematical expressions and performs calculations indicated by the mathematical expressions.

ADVANTAGE - Recognises all types of calculations and mathematical functions thereby providing same capabilities as most powerful calculators.

Dwg.1/58

Derwent Class: T01; T04;

Int Pat Class: G06F-003/023; G06F-003/05; G06F-003/14; G06F-009/22;

G06F-015/02; G06F-015/419; G06F-015/44

10/7/2 (Item 2 from file: 351) DIALOG(R) File 351: DERWENT WPI

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004091905 WPI Acc No: 84-237446/38

XRPX Acc No: N84-177662

Profiling control appts. compares stylus displacement vector changes in

successive pairs of sampling periods to control speed

Patent Assignee: (FUFA ) FANUC LTD; (MATS/) MATSUURA H

Author (Inventor): MATSUURA H

Number of Patents: 005

Patent Family:

CC	Number	Kind	Date	Week	
WO	8403466	A	840913	8438	(Basic)
EΡ	139011	A	850502	8518	
US	4646225	A	870224	8710	
EΡ	139011	В	890628	8926	
DE	3478796	G	890803	8932	

Priority Data (CC No Date): JP 8335589 (830304)

Applications (CC, No, Date): WO 84JP72 (840228); EP 84900891 (840228); US 673747 (841105)

Language: English; Japanese

EP and/or WO Cited Patents: JP 76027310; EP 42304; GB 2088094; JP 51027310

Designated States (National): US

(Regional): DE; FR; GB

Filing Details: EP0139011 Based on WO8403466 (1543AR); US4646225 Based on WO8403466 (+28.02.84-WO - JP0072) (1824RA)

Abstract (Basic): WO 8403466

The appts. controls speed w.r.t. changes in <u>stylus</u>
displacement vectors. Signals x, indicating the displacement of a
<u>stylus</u> <u>tracing</u> a model are supplied via a displacement
synthesis circuit, speed component <u>calculators</u>, a distribution
circuit and amplifiers etc. to x,y and z axis motors. The displacement

, ' a

synthesis circuit arso supplies composite signars to a sampling unit including a sampling circuit, delay circuit and multiplier while x, y and z axis smapling units with the same configuration receive the tracer head output.

The units serve to detect stylus displacement vectors in the current sampling period and the preceding sampling period. All the sampling units' outputs are processed together to give a vector change value that is compared with a reference and fed to a speed component calculator .

ADVANTAGE - Prevents bite-in at corners. @(14pp Dwg.No.0/2 Abstract (US): 8710 US 4646225

Sampling circuits respectively sample a composite displacement signal and displacement signals in the X-axis to Z-axis directions at equal time intervals. An arithmetic circuit obtains the angle between the displacement vector of a stylus at the current sampling and the displacement vector of the stylus at the previous sampling from the sample values by the sampling circuits.

A comparator compares the result of calculation by the arithmetic circuit and a reference level and, according to the result of comparison, controls whether to decrease the feed rate.

ADVANTAGE - Cutter is prevented from biting into workpiece at sudden change point in configuration of model. @(6pp)@
Abstract (EP): 8926 EP 139011

Tracer control equipment operable to control a cutting means to machine a workpiece into the form of a traced model, the equipment comprising; a tracer head (2) supporting A stylus (1) for tracing a model, the tracer head (2) being adapted to output displacement signals in dependence upon displacement of the stylus (1); a displacement calculation circuit (3) coupled to the tracer head (2) for calculating a composite displacement signal drive motors (11X, 11Y, 11Z) arranged to provide relative displacement between the tracer head (2) and the cutting means on one hand, and the model and the workpiece on the other, the drive motors (11X, 11Y, 11Z) being controlled in dependence on the displacement calculation circuit (3); and circuitry operable to decrease the speed of said relative displacement when it detects that the stylus (1) is displaced by a relatively large amount relatively quickly, thus indicating that it has encountered a corner of the model characterised in that this circuitry comprises sampling circuits (12X, 12Y, 12Z, 12) for sampling the displacement signals and the composite displacement signal respectively at regular time intervals, and calculating means for calculating the angle between displacement vectors of the stylus (1) at a current and a previous sampling on the basis of current and previous sample values from the sampling circuits (12X, 12Y, 12Z, 12), these calculating means being operable to provide a value of said angle and to order a decrease in the speed of said relative displacement when it thereby detects that the angle changes too quickly. @(8pp)@

Derwent Class: T06; X25; P56; R26

Int Pat Class: B23Q-035/00; G05B-019/18; G05B-021/02

10/7/3 (Item 1 from file: 2) DIALOG(R)File 2:INSPEC

(c) 1994 Institution of Electrical Engineers. All rts. reserv.

03883530 INSPEC Abstract Number: C91037795

Title: Chipping at the past (archaeology automation)

Author(s): Geake, H.; Geake, E.

Journal: Electronics World + Wireless World vol.97, no.1662 p.286-8

Publication Date: April 1991 Country of Publication: UK

ISSN: 0266-3244 CODEN: EWWWE6

Language: English Document Type: Journal Paper (JP)

Treatment: Applications (A)

Abstract: Archaeology has beaten electronics and engineering, and become the first discipline to use the Gridpad computer. The Gridpad is a hand-held computer without a keyboard; instead, it has a brass for writing on its A5-sized screen. It recognises handwriting store drawings and signatures as bit-maps in its 1 Mbyte memory. Its maker, GRiD Computer Systems, believes it to be unique. The machine is waterproof and fairly rugged and was designed to be used like a clipboard. But it also has a nine-pin serial port, so can collect data automatically from electronic instruments. The Psion Organiser, a hand-held computer, is used calculator to derive 3D coordinates. The Husky Hunter an electronic computer can download data from an electronic theodolite and store the raw data as well as the coordinates. These systems represent the first stage of automation. (0 Refs)

10/7/4 (Item 2 from file: 2)

DIALOG(R)File 2: INSPEC

(c) 1994 Institution of Electrical Engineers. All rts. reserv.

02319499 INSPEC Abstract Number: C84045112, D84002669

Title: Write on (Micropad and Penpad)

Author(s): Moody, G.

Journal: Practical Computing vol.7, no.9 p.104-6
Publication Date: Sept. 1984 Country of Publication: UK

CODEN: PRCODZ ISSN: 0141-5433

Language: English Document Type: Journal Paper (JP)

Treatment: Practical (P)

Handwritten Abstract: character-recognition systems limit severely range of acceptable input. Apart from defining basic letter and number shapes, even the order in which <u>pen</u> strokes are entered and their direction-up or down-may be prescribed. A common technique is to use a grid entry system that allows for greater control over variations in input. Quest's Micropad terminal adopts such an approach. A grid of 16 by 32 squares lies on a touch-sensitive pad. Text is entered using, say, or pencil, and a hand rest is provided to insulate the pad from direct hand pressure. The standard system costs Pounds 995, intelligent system costs Pounds 1295. Prices exclude VAT, and both systems require host computer. Software for IBM PC, Sirius, etc. is supplied free. Pencept's Penpad is distributed in the UK by Kode Ltd. Unlike the Micropad, the Penpad uses a magnetic <u>pen</u>. Penpad 200, terminal with screen, costs Pounds 1,985 plus Penpad 320, for IBM PC, costs Pounds 750+VAT. At the other end of the spectrum is Casio's PF-8000, which could well prove to be this year's executive toy. A pocket calculator -cum-computer, it offers all the standard arithmetical functions together with a small alphanumeric memory. input mode is precisely the same as for the Micropad and Penpad. Casio PF-8000 is supplied by Casio Electronics Ltd., and costs only Pounds 59.95 including VAT. (0 Refs)

10/7/5 (Item 3 from file: 2)

DIALOG(R) File 2: INSPEC

(c) 1994 Institution of Electrical Engineers. All rts. reserv.

INSPEC Abstract Number: A81079388

Title: Scanning electron microscopy and data digitization of craniofacial growth

Author(s): Rice, R.W.; Oyen, O.J.; Walker, A.C.

Author Affiliation: Dept. of Anatomy, Texas A& Univ., College Station, TX, USA

Conference Title: Proceedings of the Society of Photo-Optical Instrumentation Engineers, vol.166. NATO Symposium on Applications of Human Biostereometrics p.346-9

Editor(s): Coblentz, A.M.; Herron, R.E. Publisher: SPIE, Bellingham, WA, USA

Publication Date: 1980 Country of Publication: USA xiv+374 pp.

ISBN: 0 89252 194 5

Conference Sponsor: SPIE

Conference Date: 9-13 July 1978 Conference Location: Paris, France

Language: English Document Type: Conference Paper (PA)

Treatment: Practical (P)

Abstract: The scanning electron microscope (SEM), combining high resolution and large depth of focus, affords detailed observation of surface microstructure in a three-dimensional perspective. It also allows specimen dimensions and avoids the processing and sectioning limitations of light and transmission electron microscopic procedures. For these reasons the SEM is ideally suited for analyses of bone, a rigid tissue whose surface topography and internal architecture accurately reflect the developmental, metabolic and mechanical influences exerted upon Furthermore, SEM photomicrographs are compatible with devices for quantification, mathematical manipulation and graphic reconstruction of the Features of a photo may be <u>traced</u> with a <u>stylus</u> on the electromagnetically activated surface of a data digitizer , which converts the outlined path to x and y axis coordinates. Interfaced with a <u>calculator</u> these data undergo algebraic and geometrical computation and may be stored for statistical analyses. Alternatively, micrograph transparencies may be utilized micro-stereophotogrammetric procedures in which x, y and Z axis coordinates are generated for selected morphological points. The authors' research spatiotemporal interrelationships of primate craniofacial growth evidenced by changes in the skeletal gross morphology and microanatomy the orbital region, jaws and teeth during their growth and development. Applications of SEM and digitization techniques to these studies and an evaluation of the derived data are presented. (10 Refs)

10/7/6 (Item 4 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 1994 Institution of Electrical Engineers. All rts. reserv.

INSPEC Abstract Number: C78006427

Title: A cost-effective system for obtaining comprehensive cardiovascular information on the critically ill patient

Author(s): Engler, P.E.; Cohn, J.D.; Del Guercio, L.R.M.

Author Affiliation: Dept. of Surgery, St. Barnabas Medical Center, Livingston, NJ, USA

Journal: Medical Instrumentation vol.11, no.5
Publication Date: Sept.-Oct. 1977 Country of Publ p.311-14 Publication Date: Sept.-Oct. 1977 Country of Publication: USA

CODEN: MLISBY ISSN: 0735-6757

Language: English Document Type: Journal Paper (JP)

Treatment: Practical (P)

Abstract: A relatively simple and inexpensive data management system is described with which comprehensive physiologic and cardiovascular profiles The system is comprised of a desk-top programmable produced. calculator interfaced with an acoustic digitizer input, and an X-Y plotter, with alphanumeric printing output capability. Numerical clinical data such as intracardiac pressures and blood gas values are entered into calculator via the keyboard, and graphical data such as

dye-dilution curves of ventricular contours are <u>digitized</u> with a <u>pen stylus</u> on the acoustic tablet. The data are processed in the <u>calculator</u> and the results charted in familiar and readily interpreted bar-graph format on preprinted charts on the X-Y plotter. (6 Refs)

10/7/7 (Item 5 from file: 2)

DIALOG(R) File 2:INSPEC

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01122119 INSPEC Abstract Number: C77027136

Title: DIY computer graphics hardware

Author(s): Cowie, D.I.

Author Affiliation: Dept. of Mech. Engng., Polytech. of Wolverhampton, Wolverhampton, UK

Journal: Chartered Mechanical Engineer vol.24, no.7 p.65-7

Publication Date: July 1977 Country of Publication: UK

CODEN: CHMGAF ISSN: 0306-9532

Language: English Document Type: Journal Paper (JP)

Treatment: Practical (P)

Abstract: Proprietary digitiser and graphics display systems cost many thousands of pounds. By compromising on performance and flexibility the system described was built for a few hundred. The facility was developed Hewlett Packard 9820 calculator around a two-dimensional only. The system has two interfaces connected digitiser and papertape punch, or memory, display CRT and light pen , respectively. A tape store and plotter complete the setup. (0 Refs)

10/7/8 (Item 1 from file: 8)
DIALOG(R)File 8:Ei Compendex\*Plus(TM)

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00856950 E.I. Monthly No: EI7910079074 E.I. Yearly No: EI79044341

Title: IMAGE ANALYSIS.

Author: Birk, G.

Corporate Source: Wild Leitz Pty Ltd, Aust

Source: Australian Journal of Instrumentation and Control v 40 n 1 Feb 1979 p 8-9

Publication Year: 1979

CODEN: AJICA9 ISSN: 0045-0626

Language: ENGLISH

Journal Announcement: 7910

Abstract: This article describes the Leitz A. S. M. Semi-Automatic Image Analyzer. The instrument basically consists of: 1. A power supply unit with built-in microprocessor, a punched tape reader (to insert programs) and terminals for direct print-out connection, respectively interfaced with teletype connection for tele-printer and later programmable calculators or computer systems. 2. An electronic <u>tracing</u> board with instruction field, data display and control lamps for the different functions including warning lights and buzzer for wrong instructions or mistakes by the operator. An electronic <u>pen</u> with interchangeable color <u>pens</u> is used to <u>trace</u> image features placed on the <u>tracing</u> board. The board has an area of 28cm X 25cm and therefore allows relatively large images to be analyzed. Due to the overall concept of the Leitz A. S. M. it caters without any modification or additional accessories for a number of different forms of images to be analyzed: light microscopy; photographic prints; large transparencies. By selecting one of the three programs all parameters required will be calculated accordingly and stored. The stored data can be recalled either one after the other or automatically in cases

where peripheral equipment is connected. Altogether the A. S. M. carries out the calculation for 18 different parameters and provides 99 different functions. ? ? ?ds s11-s12 Set Items Description S11 9 S7 AND S2 S12 5 S11 NOT S9 ?t 12/7/1-3 12/7/1 (Item 1 from file: 351) DIALOG(R) File 351: DERWENT WPI (c) 1994 Derwent Info Ltd. All rts. reserv. 008085576 WPI Acc No: 89-350688/48 XRPX Acc No: N89-266635 \*Image available\* Processing pen identifying characters as they are written down performs <u>mathematical</u> functions on data and displays results on integral calculator panel Patent Assignee: (HAIG/) HAIGH R D Author (Inventor): HAIGH R D Number of Patents: 002 Number of Countries: 001 Patent Family: CC Number Kind Date Week GB 2219119 Α 891129 8948 (Basic) В GB 2219119 930519 9320 Priority Data (CC No Date): GB 897603 (890405) Applications (CC, No, Date): GB 897603 (890405) Abstract (Basic): GB 2219119 A stylus (1) is pivoted about a pivot (3). Movement of the stylus is traced by a sewing needle (9) moving over a matrix of wires (10). Writing of a decimal point is detected when the pivot housing (4) closes electrical contact (5). From the start of  $\underline{Stylus}$  movement the matrix location values are scanned by a Chip (Routine A) at a high-speed scanning rate and stored in sequential internal memory lcoations. At the end of Stylus movement, representing the completion of a data character, the stored sequence of lcoation values is examined by CHIP software calculator (Routine B) and the identified character passed to the This cycle is repeated until one of the mathematical function signs is written indicating the completion of the current number. USE - Enables written character to be recognised and then electronically generated for subsequent processing. @(10pp dwg.No.1/4 Abstract (GB): 9320 GB 2219119 B This invention is a pen which is designed to identify characters as they are written down, pass this information to an <u>calculator</u>, perform the requested mathematical function and then display the results on an integral calculator panel.\$ The principle innovative concept of the pen is embodied in a Character Recognition Unit, which enables a written character to be

recognised and then electronically generated for subsequent

processing.\$

.

In appearance the <u>pen</u> (FIG 4) is similar to that of a normal <u>pen</u>, with the addition of a <u>calculator</u> display panel and a number of calculator control buttons. Any of the control keys or buttons of the conventional <u>calculator</u> could be used, but in this example 3 only are used: - ON/OFF - CLEAR ENTRY (CE) - EQUALS (=).

An example of the invention will now be described with reference to the accompanying drawings in which: Figure 1 shows in cross-section the pen's component parts. Figure 2 shows the Character Recognition Unit in block diagram. Figure 3 shows in detail the Location Matrix component. Figure 4 illustrates the pen in use.

Dwq.1/4

Derwent Class: T04; R27; R28;

Int Pat Class: G06F-003/03; G06K-009/24

12/7/2 (Item 1 from file: 350) DIALOG(R)File 350:Derwent World Pat.

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001242766 WPI Acc No: 75-C6554W/10

Pocket mechanical calculator for monetary arithmetic - has counter wheels actuated by stylus inserted via arcuate slot

Patent Assignee: (KASN/) W KASNER

Number of Patents: 002

Patent Family:

CC Number Kind Date
GB 1386365 A 750305
CA 968326 A 750527 Week

7510 (Basic)

7523

Priority Data (CC No Date): GB 729616 (720301)

Abstract (Basic): The <u>calculator</u> forms a small machine for adding and subtracting values when operated by a pointed stylus and may e.g. be mounted in a cover for a cheque book. The calculator mechanism consists of a number of wheels each having ten teeth marked with the digits 0 to 9 and mounted for rotation between rigid, or semi-rigid front and back panels, with windows in the panels. The wheels are disposed in side-by-side relationship and coupled so that one revolution of one wheel advances the next higher order wheel by one tooth. An arcuate slot extending over the major part of a circle is formed in each panel over each wheel so that the wheels may be rotated by engaging a stylus through the slots for addition and subtraction of numbers

Derwent Class: T01; T05; R27; R28;

Int Pat Class: G06C-001/00; G06C-005/02; G06C-007/00; G06C-011/02;

G06C-015/04; G06M-001/14

12/7/3 (Item 1 from file: 8)

DIALOG(R)File 8:Ei Compendex\*Plus(TM)

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02635400 E.I. Monthly No: EI8809087571

Title: TRIANGULATION: MATHEMATICALLY WELL-DEFINED TECHNIQUE FOR

CONSTRUCTING GEOLOGIC MAPS.

Author: Henson, M. R.; Moyer, R. W.

Corporate Source: Conoco (UK) Ltd, London, Engl

Source: Oil and Gas Journal v 86 n 19 May 9 1988 p 56-58

Publication Year: 1988

CODEN: OIGJAV ISSN: 0030-1388

Language: English

Document Type: JA; (Journal Article) Treatment: G; (General Review); T;

(Theoretical); X; (Experimental) Journal Announcement: 8809 Abstract: Special circumstances arise which require the construction of geologic maps without subjective bias and according to a prescribed set of mathematical rules. This article describes triangulation, a mathematically well-defined collection of rules for the manual construction of geologic maps. Given only control points and a region defined by a closed polygonal boundary, triangulation defines uniquely a continuous surface throughout the bounded region, has no discontinuities, and honors each control point. The map construction requires only a , ruler, and hand <u>calculator</u>. Map contours are drawn as straight line segments joining interpolated contour control points and control points of the same value. These contours follow a surface of linked triangular facets (planes) whose intersections and attitudes are defined by the control point locations, their values, and the polygonal boundary. ?t 12/3, kwic/4-5 >>>KWIC option is not available in file(s): 6 (Item 1 from file: 239) DIALOG(R) File 239: MathSci(R) (c) 1994 American Mathematical Society. All rts. reserv. 3422336 MR 92j#01002 De la machine a calculer de Pascal aux ordinateurs. From Pascal's calculating machine to the computer Lions, Jacques-Louis (Departement de Mathematiques, College de France, 75231 Paris 05, France) Corporate Source Codes: F-CDF C. R. Acad. Sci. Paris Ser. Gen. Vie Sci. Comptes Rendus de l'Academie des Sciences. Serie Generale. La Vie des Sciences, 8, no. 3, 221--240. ISSN: 0762-0969 1991, Language: French Subfile: MR (Mathematical Reviews) Abstract Length: MEDIUM (21 lines) Reviewer: Booth, A. D. (Sooke, BC) ...example, the interior of the Pascal adder with the designer's signature, the Roth circular <u>calculators</u>, one of which bears the intriguing caption ''calculates without the aid of \_pen intelligence''! Analog machines are mentioned and also the relationship of the work of Fourier... Descriptors: ...\*History and biography (See also the classification number --03 in the other sections)-History of mathematics mathematicians -General histories, source books; 68-03 -Computer science (For papers involving machine computations and programs in a mathematical area, see Section --04 in that area)-Historical (must also be assigned at least one... 12/3,KWIC/5 (Item 2 from file: 239) DIALOG(R) File 239: MathSci(R) (c) 1994 American Mathematical Society. All rts. reserv. 2698844 MR 84q#01005 Pribory i instrumenty istoricheskogo znacheniya. Devices and instruments of historical significance Vychislitelnye mashiny. [Machines for computation]

Maistrov, L. E. Petrenko, O. L.

1

Publ: ''Nauka'', Moscow, 1981, 158 pp. Language: Russian Subfile: MR (Mathematical Reviews) AMS Abstract Length: LONG (31 lines) Reviewer: Tee, Garry J. (Auckland) ... A proportional circle, made in 1616 by Luduvicus Sementius, of the earliest analog <u>calculators</u> extant. Jewna Jacobson's adding machine, made at Minsk in c1770, is one of the... ...are various arithmometers of the type of Thomas of Colmar, and many simple adding machines ( stylus -operated) of the type of Kummer. There are many arithmometers of Ohdner type (including Brunsviga... Descriptors: ...\*History and biography (See also the classification number --03 in the other sections)-History of mathematics mathematicians -General histories, source books ...; History and biography (See also the classification number --03 in the other sections)-History of mathematics and mathematicians -Miscellaneous topics... ...68-03 -Computer science (For papers involving machine computations and programs in a specific mathematical area, see Section --04 in that area)-Historical (must also be assigned at least one... ?t 17/7/1-2 (Item 1 from file: 351) DIALOG(R) File 351: DERWENT WPI (c) 1994 Derwent Info Ltd. All rts. reserv. 009786015 WPI Acc No: 94-065868/08 XRPX Acc No: N94-051512 \*Image available\* Electronically compressing handwritten data generated on digitiser tablet - involves determining points of stroke contour data that are essential to reconstruction of original writing from sampled points Patent Assignee: (COMM-) COMMUNICATION INTELLIGENCE CORP Author (Inventor): OSTREM J S Number of Patents: 001 Number of Countries: 019 Patent Family: CC Number Kind Date Week WO 9403853 940217 9408 **A**1 (Basic) Priority Data (CC No Date): US 921831 (920729) Applications (CC, No, Date): WO 93US6883 (930722) Language: English EP and/or WO Cited Patents: US 4524456; US 4807143; US 5023918; US 5126948 Designated States (National): CA; DE; GB; JP; KR (Regional): AT; BE; CH; DE; DK; ES; FR; GB; GR; IE; IT; LU; MC; NL; PT; SE Abstract (Basic): WO 9403853 The method involves capturing a parametric representation of data handwritten on a <u>digitiser</u> tablet. The tablet (100) samples the position of a writing \_pen , continuously transmitting data to a computer in the form of x and y coordinates (110). An indication of whether the pen is touching the surface of the tablet is also

1 "

?

transmitted.

After preprocessing to smooth and filter the data and remove duplicate points, a determination is made of which points along the stroke contour are essential to the reconstruction of a quality facsimile of the original writing from the sampled points (140). This determination is based upon local curvature, local extrema, and the endpoints of the stroke. A standard <u>mathematical</u> compression technique (16) may also be applied in an optional second stage.

ADVANTAGE - Compresses electronic ink with high compression while requiring minimal memory and CPU power.

Dwq.1/15

Derwent Class: T01; T04;

Int Pat Class: G06F-003/14; G06F-009/00; G06K-009/36; G06K-009/46

17/7/2 (Item 2 from file: 351)

DIALOG(R) File 351: DERWENT WPI

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004525045 WPI Acc No: 86-028389/04

XRPX Acc No: N86-020755

<u>Digitisation</u> of <u>handwriting</u> or drawing by light <u>pen</u> having elementary <u>pen</u> movements represented by digital index pairs which may be added in microcomputer

Patent Assignee: (BOUK/) BOUKRIS A

Author (Inventor): BOUKRIS A

Number of Patents: 007

Patent Family:

CC	Number	Kind	Date	Week	
WO	8600444	Α	860116	8604	(Basic)
FR	2566556	Α	851227	8607	
EΡ	187775	Α	860723	8630	
JP	61502569	W	861106	8651	
CN	85106366	Α	870318	8823	
EΡ	187775	В	910306	9110	
DE	3582049	G	910411	9116	

Priority Data (CC No Date): FR 849954 (840625); CN 85106366 (850824) Applications (CC, No, Date): WO 85FR171 (850624); EP 85903014 (850624); JP 85502825 (850624)

Language: French

EP and/or WO Cited Patents: US 3199078; 5.Jnl.REF

Designated States (National): JP; US

(Regional): AT; BE; CH; DE; FR; GB; IT; LU; NL; SE; LI

Filing Details: JP61502569 Based on WO8600444 (5pp); EP0187775 Based on WO8600444

Abstract (Basic): WO 8600444

The entire movement of the light <u>pen</u> involved in drawing or writing a character is treated as a continuous sequence including spaces. Two indices are assigned to each elementary point according to whether it is a positive point or a space, and to the relative position of the point immediately following.

The point is defined rigorously on the <u>mathematical</u> plane by one of six or eight digital values, each expressing the tangent at the point in question. The two indices may be added to give a single index of odd value for a positive point, or even value for a space.

ADVANTAGE - Drawing is defined by simple digital data with biunivocal relationships to its <u>mathematical</u> representation, using microcomputer. @(13pp Dwg.No.0/5)@

Abstract (EP): 9110 EP 187775

A method for developing a representation of a sample of hand writing , or any <u>trace</u> in general, by a numerical sequence, which method associates a graphics plotter, a pen and software adapted to take into account the movements of the pen, and comprises the step of assigning to each elementary point of the a first index representing the tangent to the <a href="trace">trace</a>, the method being characterized in that it also comprises the step of assigning to each elementary point of the <u>trace</u> a secondn index representing the blank or filled-in nature of the trace , the total movement of the pen over the trace being taken into account as a continuous sequence of elementary points including the blanks, the graphics plotter and the <u>pen</u> optionally being replaced by a mouse, the movements of which are taken into account by the software, or by a device for optical analysis of a pre-existing <u>trace</u> comprising an optical reading system adapted to follow the trace, the movements of which are taken into account by the software. @(11pp)@

Derwent Class: S05; T04; T01; R28;

Int Pat Class: G06K-009/22

? ? ?

?t 18/7/2

18/7/2 (Item 2 from file: 351)

DIALOG(R) File 351: DERWENT WPI

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009541696 WPI Acc No: 93-235239/29

XRPX Acc No: N93-180534 \*Image available\*

Wireless input for computer using <u>pen</u> position detection partic. for portable device - comprises <u>pen</u> -type input device having light source transmitting pulses, device body with two angle detecting section each having light receiver, and position <u>calculator</u> using angles.

Patent Assignee: (DIGI-) DIGITAL STREAM CORP

Author (Inventor): AOYAGI T; SUZUKI T

Number of Patents: 005 Number of Countries: 005

Patent Family:

CC	Number	Kind	Date	Week	
US	5227622	Α	930713	9329	(Basic)
GB	2264016	Α	930811	9332	
DE	4203591	A1	930812	9333	
CA	2060564	Α	930804	9343	
FR	2687233	A1	930813	9344	

Priority Data (CC No Date): US 831944 (920206)

Applications (CC, No, Date): FR 921346 (920206); GB 922319 (920204); DE

4203591 (920207); CA 2060564 (920203)

Abstract (Basic): US 5227622 A

The input unit (5) accommodates a battery and has power charging terminals and a guide bar. The unit also has an LED (11) near its end, two click switches (12,13) at its middle portion and a pen-end switch (14) at its end. The LED emits continuous light.

Electric pulses are generated in the circuit inside of the input unit and are converted into various light pulse patterns in accordance with various modes, such as normal mode in which all click switches are off and the pen-end switch is off, click switch on mode in which the click switches are on, and the pen-end switch on mode in which pen-end

switch is on. ADVANTAGE - Avoids problems associated with wire connections, and is usable anywhere. Suited also to character recognition systems. Dwq.3/11Derwent Class: T01; T04; W05; Int Pat Class: G01S-005/16; G01V-009/04; G06F-003/03; G06F-003/033; G06K-011/08; H04B-010/10 ?t 27/7/5,7-8 27/7/5 (Item 1 from file: 350) DIALOG(R) File 350: Derwent World Pat. (c) 1994 Derwent Info Ltd. All rts. reserv. 002383426 WPI Acc No: 80-J9895C/41 Portable bank-balance calculator - has cover cheque-book, record pad and miniature stylus -operated calculator with balance display Patent Assignee: (PINK/) PINKERMAN J P Author (Inventor): PINKERMAN J P Number of Patents: 001 Patent Family: Kind CC Number Date Week US 4224675 Α 800923 8041 (Basic) Priority Data (CC No Date): US 968308 (781211) Abstract (Basic): The calculator can be moved by its retaining attachment to a position outside the cover while still being secured to the cover. The retaining attachment may also bear, for example a memo pad, container, mirror or the like. Alternatively both the pad and the block can be slid sideways to parallel each other and overlap the sides of the cover but not each other, and the pad or block carries the calculator with it, for convenience of use. The calculator includes recessed keys and plus and minus signals visually displayed in a readout window. An attenuator with purposely exclude all functions, except addition and subtraction for simplicity of operation. The calculator may further have a permanent decimal point and a double zero key, and it may retain the last figures (balance) readout before inactivation, to avoid having to re-enter them upon reactivating the calculator. Derwent Class: T01; R27; Int Pat Class: G06F-015/02 (Item 3 from file: 350) DIALOG(R) File 350: Derwent World Pat. (c) 1994 Derwent Info Ltd. All rts. reserv. 001675892 WPI Acc No: 77-B2360Y/06 Data entry and decoding system for electronic calculator - uses conductive stylus contacting conductive segments to generate multibit codes Patent Assignee: (SUIN ) SOC SUISSE IND HORLOGERE Number of Patents: 001 Patent Family: CC Number Kind Date Week US 4005400 7706 Α 770125 Priority Data (CC No Date): GB 7518902 (750430)

? ?

Abstract (Basic): A conductive stylus is utilized in conjunction with conductive segments to provide for data entry into extremely small calculators such as might be incorporated in an electronic digital watch case. Multi-bit codes, representing the segments contacted by the <u>stylus</u>, are generated and stored as the <u>stylus</u> moves over the segments. The codes are stored until a complete character has been scribed. The stored multi-bit codes are then analyzed in accordance with the segments contacted and the sequence in which they were contacted to determine what character was scribed Derwent Class: W05; R31; Int Pat Class: G08C-001/00 (Item 1 from file: 2) 27/7/8 DIALOG(R) File 2: INSPEC (c) 1994 Institution of Electrical Engineers. All rts. reserv. 01078548 INSPEC Abstract Number: C77018207 Title: Electronic <u>calculator</u> based on character recognition of input stylus acceleration dynamics Author(s): Morrissey, J.H. Author Affiliation: IBM, Armonk, NY, USA Journal: IBM Technical Disclosure Bulletin vol.19, no.7 p.2816-17 Publication Date: Dec. 1976 Country of Publication: USA CODEN: IBMTAA ISSN: 0018-8689 Language: English Document Type: Journal Paper (JP) Treatment: New Developments (N) Abstract: An electronic <u>calculator</u> system is described which is based on input information being entered into the system by a user-held writing or stylus pen . The pen is equipped with a number accelerometers whose output is supplied to a character recognition logic block for recognizing input characters and operations. The output from the recognition logic block is then fed into the electronic <u>calculator</u> more or less conventional form. (0 Refs) ? ? ?t 28/7/14 (Item 7 from file: 350) DIALOG(R) File 350: Derwent World Pat. (c) 1994 Derwent Info Ltd. All rts. reserv. 001348004 WPI Acc No: 75-003457/22 XRAM Acc No: C75-703457 Counting number of text words on page - with electrical pen pulse to calculator when pressed against page Patent Assignee: (WILL/) WILLQUIST G Number of Patents: 001 Patent Family: CC Number Kind Date Week SE 7313504 750505 7522 Α Priority Data (CC No Date): SE 7313504 (731004) Derwent Class: T05; R28; Int Pat Class: G06M-001/00 ? ?ds Set Items Description

S1	26527	CALCULATOR?		
S2	1370321	MATHEMATIC? OR ARITHMETIC?		
S3	20841	PEN OR PENS OR STYLUS? OR STYLI		
S4	35194	DIGITIS? OR DIGITIZ?		
S5	249395	TRACE? OR TRACING		
S6	6746	HANDWRIT? OR HAND(W) (WRITE? OR WRITING OR WRITTEN)		
S7	82	S1 (S) S3		
S8	290	S1(S)(S4 OR S5 OR S6)		
S9	9	S7 AND S8		
S10	8	RD (unique items)		
S11	9	S7 AND S2		
S12	5	S11 NOT S9		
S13	30	S8 AND S2		
S14	26	S13 NOT (S9 OR S11)		
S15	350	S2 AND S3		
S16	21	S15 AND S4		
S17	7	S16 AND (S5 OR S6)		
S18	68	S7 NOT (S9 OR S11 OR S17)		
S19	1371312	CALCULAT?		
S20	495	S3 (S) S19		
S21	81	S20 AND (S4 OR S5 OR S6)		
S22	70	S21 NOT (S9 OR S11 OR S17)		
S23	6	S22 AND S2		
S24	60	S18 NOT PY=1993:1995		
S25	33	S1 (6N) S3		
S26	27	S24 AND S25		
S27	10	· · · · · · · · · · · · · · · · · · ·		
Ş28	24	S26 NOT S27		
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SYSTEM:OS - DIALOG OneSearch
  File 275:Computer Database (TM)
                                  1983-1994/Nov W4
         (c) 1994 Information Access Co
  File 233:Microcomputer Abstracts(TM) 1981-1994/Nov
         (c) 1994 Learned Inform. Inc.
  File 237:Buyer's Guide to Micro Software(SOFT)
                                                   1993/Sep
         (c) 1993 ONLINE Inc.
  File 256:SoftBase:Reviews, Companies & Prods.
                                                 1994/Nov
         (c) 1994 Info. Sources Inc
  File 278: Microcomput. Software Guide 1994/Nov
         (c) 1994 Reed Reference Publishing
  File 751:Datapro Software Directory 1994/Oct
         (c) 1994 McGraw-Hill, Inc.
      Set Items Description
           ----
?
ds
Set
        Items
                Description
S1
         3850
                CALCULATOR?
S2
                MATHEMATIC? OR ARITHMETIC?
        13722
S3
         6483
                PEN OR PENS OR STYLUS? OR STYLI
S4
         5885
                DIGITIS? OR DIGITIZ?
                TRACE? OR TRACING
S5
         4234
S6
         1698
                HANDWRIT? OR HAND(W) (WRITE? OR WRITING OR WRITTEN)
S7
           53
                S1(S)S3
S8
           64
                S1(S)(S4 OR S5 OR S6)
S9
           26
                S7 AND S8
                RD (unique items)
S10
           21
                S7 AND S2
           1
S11
S12
            1
                S11 NOT S9
S13
           4
                S8 AND S2
S14
           4
                S13 NOT (S9 OR S11)
           35
S15
                S2 AND S3
            2
                S15 AND S4
S16
S17
            1
                S16 AND (S5 OR S6)
S18
           26
                S7 NOT (S9 OR S11 OR S17)
S19
        18174
                CALCULAT?
                S3(S)S19
S20
           98
S21
           30
                S20 AND (S4 OR S5 OR S6)
           3
                S21 NOT (S9 OR S11 OR S17)
S22
S23
           0
                S22 AND S2
           13
                S18 NOT PY=1993:1995
S24
S25
           14
                S1 (6N) S3
           6
                S24 AND S25
S26
           2
                S24 AND (STYLUS? OR STYLI)
S27
           6
                S26 NOT S27
S28
S29
           53
                S9 OR S11 OR S18 OR S24 OR S27
S30
           26
                S29 NOT PY=1993:1995
S31
           23
                RD (unique items)
?t 31/7/1-23
 31/7/1
            (Item 1 from file: 275)
DIALOG(R)File 275:Computer Database(TM)
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TITLE: Infolio offers mobile workers the power of the pen. (Hardware Review) (PI Systems Corp.'s Infolio pen-tablet computer) (Evaluation)

AUTHOR: Waurzyniak, Patrick

JOURNAL: Byte VOL.: v17 ISSUE: n12 PAGINATION: p68(1)

PUBLICATION DATE: Nov, 1992 ARTICLE TYPE: Evaluation SOURCE FILE: CD File 275

ABSTRACT: PI Systems Corp's \$1,895 Infolio is a proprietary <u>pen</u>-tablet system designed for mobile workers performing data-collection tasks. It is based on a Motorola 68331 microprocessor, a chip more often used as an embedded microcontroller, and has three PCMCIA drive slots, one of which contains a 2Mbytes static RAM card with the operating-system software. The interface is very intuitive; the user is presented with a list of graphical menus representing forms-based vertical applications, and the developer's edition includes a clipboard environment with

<u>calculator</u>, address-book and memory-usage-monitor utilities. A software development kit called PerformaSDK that includes an object-oriented programming tool and integrated database is available for \$1,095. PI hopes that its vertical approach will enable it to succeed in the <u>pen</u> -system market where others have failed.

31/7/2 (Item 2 from file: 275)
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12341535

TITLE: Apple introduces 'Newton' featuring printing by hand. (Product Announcement)

AUTHOR: Yamada, Ken

JOURNAL: Wall Street Journal PAGINATION: pB4A(W) pB3(E)

PUBLICATION DATE: May 29, 1992 ARTICLE TYPE: Product Announcement

SOURCE FILE: NNI File 111

ABSTRACT: Apple Computer Inc introduces a prototype model of its Newton portable computer at the 1992 Consumer Electronics Show in Chicago. The Newton is a hand-held personal microcomputer with bundled software enabling it to perform such functions as <a href="https://handwriting.new.org.nition">handwriting.new.org.nition</a> recognition and wireless data exchange. It comes with an electronic <a href="pen">pen</a> so that the user can write in longhand on a screen to activate such features as automatic facsimile transmission. It also offers a <a href="calculator">calculator</a> and automatic telephone dialing functions. Industry analysts point out that the Newton offers essentially the same features as other products currently on the market, including those offered by HP. The success of the Newton, which is touted as the first in a line of consumer electronics products from Apple, will depend on how it is marketed.

31/7/3 (Item 3 from file: 275)
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12023107 \*Use Format 9 for FULL TEXT\*

TITLE: PenStuff to add <u>pen calculator</u> to Go's PenPoint. (PenStuff Inc. introduces PenStuff RPN12C+ Financial Calculator for PenPoint operating system) (brief article) (Product Announcement)

AUTHOR: Schroeder, Erica

JOURNAL: PC Week VOL.: v9 ISSUE: n10 PAGINATION: p62(1)

PUBLICATION DATE: March 9, 1992 ARTICLE TYPE: Product Announcement AVAILABILITY: FULL TEXT Online LINE COUNT: 00028

SOURCE FILE: CD File 275

31/7/4 (Item 4 from file: 275)
DIALOG(R)File 275:Computer Database(TM)

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11989500 \*Use Format 9 for FULL TEXT\*

TITLE: Momenta helps users get grip on pen apps. (Momenta Corp.'s Momenta portable computer)

AUTHOR: Schroeder, Erica

JOURNAL: PC Week VOL.: v9 ISSUE: n12 PAGINATION: p43(2)

PUBLICATION DATE: March 23, 1992

AVAILABILITY: FULL TEXT Online LINE COUNT: 00050

SOURCE FILE: CD File 275

ABSTRACT: Momenta Corp's \$4,995 Momenta \_pen\_ -based input/output portable computer is an intermediate solution between proprietary and DOS-and Microsoft Windows graphical user interface (GUI)-based systems. The computer's Small Talk operating system includes \_handwriting -recognition capabilities that work with applications such as a calendar, \_calculator , facsimile and spreadsheet software. The system is not foolproof, and users tend to limit their dependence on \_handwriting -recognition-based operations. The company's next version of the computer's operating system will enable users to switch freely between the DOS and Momenta operating systems. Momenta plans to add support of Microsoft Corp's \_Pen\_ Windows operating system when that product becomes available.

31/7/5 (Item 5 from file: 275)
DIALOG(R)File 275:Computer Database(TM)
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11409875

TITLE: Momenta rewrites the notebook rules. (PenTop portable computer) (includes related article on Momenta marketing strategy) (Product Announcement)

JOURNAL: Electronic Engineering Times ISSUE: n662 PAGINATION: p1(2)

PUBLICATION DATE: Oct 7, 1991

ARTICLE TYPE: Product Announcement

SOURCE FILE: CD File 275

ABSTRACT: Momenta Corp introduces a <u>pen</u> -input machine that provides DOS compatibility and the functionality of a desktop computer. The \$4,995 six-pound PenTop Computer is based on a 20-MHz Intel Corp 80386SX processor, and Momenta claims that it is faster than other <u>pen</u> -based or touchscreen systems released by its competitors. The system is faster because it uses a custom reduced-instruction-set computing (RISC) processor that controls a thin-film, 640- by 480-pixel, <u>digitizing</u> screen. It is bundled with applications such as <u>calculator</u>, a phone book and dialer, a calendar with alarms, and a utility that offers file transfer/translation to rival data formats. Momenta will market the machine for business and personal productivity applications to users who find it inconvenient to use a mouse or keyboard to enter data. Momenta believes that this will make the system's price, which is ten to fifteen percent higher than other systems, palatable to users.

31/7/6 (Item 6 from file: 275)
DIALOG(R)File 275:Computer Database(TM)
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11288254 \*Use Format 9 for FULL TEXT\*

TITLE: From hands to LANs. (local-area networks) (includes related article on putting Ethernet on the motherboard) (connecting palmtop computers to LANs)

AUTHOR: Carr, Jim

JOURNAL: LAN Magazine VOL.: v6 ISSUE: n9 PAGINATION: p115(4)

PUBLICATION DATE: Sept, 1991

AVAILABILITY: FULL TEXT Online LINE COUNT: 00285

SOURCE FILE: CD File 275

ABSTRACT: When handheld, <u>pen</u> -based microcomputers become widely available in 1992 they will introduce computing and networking to a new generation of users that have previously found computing difficult or unattractive. <u>Pen</u> -based operating systems eliminate the need for a keyboard or mouse and allow the design of <u>calculator</u> -sized computers that recognize <u>handwriting</u>. Non-typists can place orders or fill out forms with the microcomputer's <u>pen</u> or a touch-sensitive screen. Go Corp's Penpoint operating system is optimized for network connectivity. Network software applications will be available in late 1991 or early 1992.

31/7/7 (Item 7 from file: 275)
DIALOG(R)File 275:Computer Database(TM)
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07887198 \*Use Format 9 for FULL TEXT\*

TITLE: Oddball keyboards. (Hardware Review) (Key Tronic VA 101, KB5153; Jameco JE2016; Amtac Keycat; KEA Systems keyboard) (evaluation)

AUTHOR: Poor, Alfred

JOURNAL: PC Magazine VOL.: v8 ISSUE: n21 PAGINATION: p260(4)

PUBLICATION DATE: Dec 12, 1989

ARTICLE TYPE: evaluation

AVAILABILITY: FULL TEXT Online LINE COUNT: 00137

SOURCE FILE: CD File 275

ABSTRACT: Several IBM PC-compatible replacement keyboards offer unusual features geared to users with special needs. Key Tronic's \$249 KB-5153 has a touch pad instead of an numeric keypad at the right edge. The touch pad, when used with the supplied <a href="stylus">stylus</a>, can emulate a cursor pad, function keys, a mouse, or a graphics drawing tablet. Another unusual Key Tronic keyboard, the VA 101, can be configured with a magnetic credit-card stripe reader for \$700 or a bar-code reader for \$900. Jameco Electronics' \$79,95 JE-2016 has a built-in solar <a href="calculator">calculator</a> and Amtac's \$99 Keycat has a trackball mounted to the right of its numeric keypad. KEA Systems offers a replacement keyboard designed for terminal-emulation use; its keys are laid out and labeled exactly like those on a DEC VT220.

31/7/8 (Item 8 from file: 275)
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07710116

TITLE: Tandy introduces electronic version of pencil and paper; GRiDPad can make type out of block lettering for a price of \$2,395. (product announcement)

AUTHOR: Zipser, Andy

JOURNAL: Wall Street Journal PAGINATION: pB4(W) pB3(E)

PUBLICATION DATE: Sept 29, 1989 ARTICLE TYPE: product announcement

SOURCE FILE: NNI File 111

ABSTRACT: Tandy Corp introduces GRiDPad, the computer industry's answer to pencil and paper. The hand-held computer can 'read' handwritten block letters, digitize them and convert them into type. Because they are digitized, they are stored into the computer as if they were entered on a keyboard. GRiDPad, \$2,395, consists of an electronic pen and clipboard-sized glass writing surface. The product weighs just 4.5 pounds. Those who fill out forms outside of an office, such as census takers, insurance adjusters and police officers who write tickets, could all benefit from the GRiDPad. Analysts estimate that GRiDPad could capture up to 15 percent of the hand-held computer market. GRiDPad also offers plug-in storage cards that can be programmed to display forms or calculator keypads. Users can purchase a 20Mbyte hard-disk drive and keyboard to make GRiDPAd an IBM-compatible microcomputer.

31/7/9 (Item 9 from file: 275)
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06010894

TITLE: Homework can be better; software can help.

AUTHOR: McKinnon, Griggs

JOURNAL: Electronic Learning VOL.: v6 ISSUE: n7 PAGINATION: p41(2)

PUBLICATION DATE: April, 1987 SOURCE FILE: CD File 275

classroom edition of 10, \$249.95.

ABSTRACT: Davidson and Associates's Homeworker is a homework organizer which comes with ASCII text processor, outliner, calendar, <u>calculator</u> and other memory resident features. It can transform class notes into a logical and orderly format for study or paper writing and can transfer text to other more powerful word processors, if desired. It is packaged in a notebook with <u>pen</u>, paper, study guides and other student tools. Requires Tandy 1000, IBM PC-PCjr, Apple II series Price: \$89.95 or

31/7/10 (Item 10 from file: 275)
DIALOG(R)File 275:Computer Database(TM)
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04855768

TITLE: 'Scratchpad for engineers' crunches other numbers, too. (Software Review) (Mathsoft Inc's Mathcad 1.1) (evaluation)

AUTHOR: Gabaldon, Diana

JOURNAL: InfoWorld VOL.: v9 ISSUE: n21 PAGINATION: p63(2)

PUBLICATION DATE: May 25, 1987

ARTICLE TYPE: evaluation SOURCE FILE: CD File 275

ABSTRACT: Mathsoft Inc's \$249 Mathcad is the electronic equivalent of a scientific hand-held <u>calculator</u>, a graph pad, and graphic-drawing <u>pens</u>. The tool includes elementary statistics and plotting functions, nd the program is especially recommended to engineers. The package lacks statistical functions to handle multiple regression and population distribution, making it of limited use to the natural sciences. Mathcad requires an IBM PC or compatible running MS-DOS 2.0 or later; the package requires 512Kbytes of RAM and a color or Hercules graphics card.

31/7/11 (Item 11 from file: 275)
DIALOG(R)File 275:Computer Database(TM)
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04322294

TITLE: Traveling Sidekick: manages days and contacts. (Software Review) (evaluation)

AUTHOR: Mau, Ernest E.

JOURNAL: Online Today VOL.: v5 ISSUE: n8 PAGINATION: p40(1)

PUBLICATION DATE: Aug, 1986 ARTICLE TYPE: evaluation

SOURCE FILE: TI File 148; LIB

ABSTRACT: Traveling Sidekick, from Borland International Inc. for \$69.95, may be a good choice for those who travel a lot and need to organize name and address lists, phone directories, appointments and so forth. The software is really a stand-alone program, and the only relationship is bears to its namesake, Sidekick, is the ability to convert Sidekick lists or calendar files, which is a one-directional process. Not surprisingly, the first edition of this program has a number of problems including difficulty in converting files, inability to print near-letter-quality and limitations on the daily appointment schedule that may not fit the user's lifestyle and schedule. The package comes with a lose-leaf organizer, software, <a href="pen">pen</a>, solar-powered <a href="calculator">calculator</a> and a range of pre-printed forms that can be printed out before a trip, leaving the computer behind.

31/7/12 (Item 12 from file: 275)
DIALOG(R)File 275:Computer Database(TM)
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04322176 \*Use Format 9 for FULL TEXT\*

TITLE: Software, notebook combinations aid traveling manager.

AUTHOR: Glitman, Russell

JOURNAL: PC Week VOL.: v3 ISSUE: n33 PAGINATION: p113(1)

PUBLICATION DATE: Aug 19, 1986

AVAILABILITY: FULL TEXT Online LINE COUNT: 00059

ABSTRACT: Several manufacturers have developed software-notebook combinations to serve the needs of the growing number of traveling laptop computer users for planning trips, scheduling meetings, and organizing their operations away from the office. One such 'binderware' product is Traveling SideKick from Borland International, a version of the company's SideKick program, with software for calendar and address files, a six-section binder, a <a href="calculator">calculator</a>, a <a href="pen">pen</a> and extra forms. There are different sections for finance, maps, toll-free numbers, metric conversion tables, and a section for notes on current projects and meetings. Other products in this category include the following: TeleMagic from Remote Control, which helps create and maintain client files; EC Teleforms (\$295) from Executive Computer Inc., which creates computerized versions of office forms; and Cache\*One (\$77.50), intended for organizing information, planning trips, and creating computer files of business cards.

31/7/13 (Item 13 from file: 275)
DIALOG(R)File 275:Computer Database(TM)
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04259041

TITLE: One for the road. (Software Review) (a desk organizer package add-on to Sidekick computer program) (evaluation)

AUTHOR: Bartimo, Jim

JOURNAL: Personal Computing VOL.: v10 ISSUE: n6 PAGINATION: p160(2)

PUBLICATION DATE: June, 1986

ARTICLE TYPE: evaluation

SOURCE FILE: CD File 275

ABSTRACT: For travelers who already use SideKick, the utilities program from Borland International to organize calendars and phone lists or who need an attractive desktop organizer that includes a small software package, Traveling SideKick is a unique organizer. The software creates printed calendars, diaries, and labels independently or from the SideKick database. SideKick utilizes a RAM desktop program with Notepad or a word processor to generate phone directories, schedule files and address lists. Traveling Sidekick is the physical embodiment of these options, with a notebook that has pockets for user needs, plastic dividers with calculator, pen, notepad, ASCII table, diskette and manual. Phone directory files from SideKick may take time to convert and print out with Traveling SideKick software, but the schedule files are easily printed out. Traveling SideKick is favored overall and costs \$69.95.

31/7/14 (Item 14 from file: 275)
DIALOG(R)File 275:Computer Database(TM)
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04240823 \*Use Format 9 for FULL TEXT\*

TITLE: Borland's Traveling SideKick: tsk, tsk. (Software Review) (evaluation)

AUTHOR: Manes, Stephen

JOURNAL: PC Magazine VOL.: v5 ISSUE: n9 PAGINATION: p46(1)

PUBLICATION DATE: May 13, 1986

ARTICLE TYPE: evaluation

AVAILABILITY: FULL TEXT Online LINE COUNT: 00086

ABSTRACT: Borland International's Traveling SideKick is called an organizer for the computer age by the company, but in reality it is less than the latest great computer innovation. The \$69.95 utility includes a binder, a <a href="calculator">calculator</a>, a <a href="pen">pen</a>, a calendar and address forms, maps, and an area-code listing along with its database and report generator supplements to Borland's SideKick package. A number of other odds and ends are thrown into the binder of varying use, but the primary component in the package is the software, which is intended to format, print, and transform data from SideKick appointment and address files into ready-to-punch pages. The system suffers from a number of minor and major shortcomings, among which are its label generator and printer support. The inflexibility of the package makes it difficult to work with.

31/7/15 (Item 15 from file: 275)
DIALOG(R)File 275:Computer Database(TM)
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00607926

TITLE: Write On. AUTHOR: Moody, G.

JOURNAL: Practical Computing VOL.: v7 ISSUE: n9 PAGINATION: p104-106

PUBLICATION DATE: Sept., 1984

ARTICLE TYPE: evaluation

ABSTRACT: <u>Handwritten</u> character - recognition systems as an input mode are severely limited. The entering of letter and number shapes are constrained by current technology. One technique that allows control over input variations is the grid entry system such as Quest's Micropad terminal. Input is entered with <u>pen</u> or pencil via templates which are called from memory and overlaid on the grid. The Micropad can act as an intelligent terminal to computers. It is very useful for companies with a high throughput of standard forms, but is very slow. Pencept's Penpad uses

a magnetic <u>pen</u> and provides graphics capabilities and free-hand input. Penpad uses templates. It has twice the usable area as Micropad. Casio's PF-8000 uses the same input mode as Micropad in a <u>calculator</u> -computer which weighs only 106g. It is useful for memos and telephone details. However, until penpads are linked to artificial intelligence, it is unlikely that <u>handwritten</u> input will be used on a large scale. There are photographs and screen display illustrations.

31/7/16 (Item 16 from file: 275)
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00558084

TITLE: Start-Up Peripherals to Offer Graphics-Tablet Product.

JOURNAL: Computer Retail News PAGINATION: p134

PUBLICATION DATE: May 21, 1984

ABSTRACT: Super Sketch, a graphics tablet and software cartridge, is now available from Personal Peripherals Inc. The product allows a user to move a <u>stylus</u> control to produce colored drawings on the screen. Personal Peripherals is a newly-formed manufacturing company that was established by Thomas G. Milner, who is said to have set up and managed Tandy Corp's electronic- <u>calculator</u> manufacturing. Other officers are entrepreneurs in the plastics- molding and LCD business areas.

31/7/17 (Item 17 from file: 275)
DIALOG(R)File 275:Computer Database(TM)
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00518638

TITLE: Interest Grows in Versatile Ballpoint Pen Printers.

JOURNAL: Office Equipment & Products ISSUE: n2 PAGINATION: p74-76

PUBLICATION DATE: Annual, 1983

ARTICLE TYPE: evaluation

ABSTRACT: A ballpoint \_pen \_ printer consists of a plotter that uses a ballpoint \_pen \_ as its printing element. This printer is capable of producing any design or character. The operating principle is similar to \_handwriting . Several factors are responsible for the increased use of these printers: economical price, increased plotting speed, compact size, and multicolor graphic display of computer processed information. These plotters are of a drum or flat-bed type. The ballpoint \_pen \_ printer can be used in a variety of applications, including a graph \_\_calculator\_ and hand-held computers.

31/7/18 (Item 1 from file: 233)
DIALOG(R)File 233:Microcomputer Abstracts(TM)
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0295463 92BY11-012

Infolio offers mobile workers the power of the pen -- First impressions

Waurzyniak, Patrick

BYTE , November 1, 1992 , v17 n12 p68, 1 Page(s) ISSN: 0360-5280

Company Name: PI Systems

Product Name: Infolio

Presents a favorable review of Infolio (\$1895), a pen-based computer from PI Systems Corp. of Portland, OR (503). Says Infolio features a Motorola MC68331 chip running at 16MHz, three PCMCIA slots, 2MB of SRAM, an LCD VGA display, a calculator, an address book, and a memory usage monitor.

Also says the product is easy to use and is intuitive. Includes a photo and a product summary. (tbc)

31/7/19 (Item 2 from file: 233)
DIALOG(R)File 233:Microcomputer Abstracts(TM)

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0294945 92PI11-128

New pen vendor wants its slice of the PI -- New

PC Magazine , November 23, 1992 , v11 n20 p62, 1 Page(s) ISSN: 0888-8507

Company Name: PI Systems

Product Name: Infolio; Proforma SDK

Announces the release of the following products by PI Systems Corp. of Portland, OR (503): Infolio (\$1895), a pen-based computer system; and Proforma SDK (\$1095), a development environment for Infolio applications. Says Infolio features a Motorola MC 68331 chip running at 16MHz, a 12-hour battery life, three Type 1 PCMCIA slots, an LCD screen, a clock, an RS-232 slot, an address book, a calculator, and a notepad. Also says Proforma SDK features Logical Communication, which allows writing of applications that move to the next form as needed. Includes a photo. (tbc)

31/7/20 (Item 3 from file: 233)
DIALOG(R)File 233:Microcomputer Abstracts(TM)

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0285089 92IW08-133

Sharp introduces pen-enhanced Wizard OZ-9600

Lee, Yvonne

InfoWorld , August 10, 1992 , v14 n32 p28, 1 Page(s) ISSN: 0199-6649

Company Name: Sharp Electronics Product Name: Sharp Wizard OZ-9600

Reports that Sharp Electronics of Mahwah, NJ (800) introduced at the MacWorld Exposition in Boston last week and will ship at the end of the year the pen-enhanced Wizard OZ-9600 (\$NA), a pocket organizer. Says that this new Wizard is redesigned with a multiwindowed GUI; function buttons are now in the touch screen; it supports ink capture in the scrapbook module which replaces the memo module; it offers infrared data transfer between other OZ-9600s; with wireless adapters data can be transferred to personal computers or printed on a standard PC printer; and modules include calendar, schedule, three-user database files, a to-do list, an anniversary reminder, three telephone directories, a mini word processor, scrapbook, calculator, home and work clocks, and a password function. (jb)

31/7/21 (Item 4 from file: 233)
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0264055 92IW01-131

Pen system weighs under 3 pounds, costs \\$1,895

Lee, Yvonne

InfoWorld , January 13, 1992 , v14 n2 p26, 1 Page(s) ISSN: 0199-6649

Company Name: PI Systems

Product Name: Infolio

Reports that PI Systems of Portland, OR (503) will ship the Infolio (\\$1,895), a 2.9-pound pen-based computer that runs on eight AA batteries. Features the power-managing Motorola 68331 processor, a reflective VGA

display, and ROM-based memory. Includes a scribble pad, address book, calculator, calendar, clock, and handwriting trainer. Says that later versions will offer a backlit display, and a docking station and radio frequency link will be available later this year. Software development kits are available to create applications for the Infolio, with Windows, Sun Sparc Open Windows, and Macintosh development kits due out later this year. (ib)

31/7/22 (Item 5 from file: 233)
DIALOG(R)File 233:Microcomputer Abstracts(TM)
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0262025 91HC12-002

Is the pen mightier than the mouse?

Sullivan, Nick

Home Office Computing , December 1, 1991 , v9 n12 p14, 1 Page(s)

ISSN: 0899-7373

Company Name: Momenta

Presents a favorable review of the new pentop computer (\$NA) from Momenta of Mountain View, CA (415). Features a 20MHz 386SX processor. Says that this laptop, which can be controlled with a pen as well as with the keyboard, shows great potential; the pen is used to point and click; the computer recognizes handwriting in certain areas, and it comes with software that includes a notetaking application, presentation maker, calendar, address and phone book, calculator, word processor, spreadsheet, and file-transfer utilities. However says that the working model of the new system had some bugs. Includes one photo. (jb)

31/7/23 (Item 6 from file: 233)
DIALOG(R)File 233:Microcomputer Abstracts(TM)
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098401 84MW09-011

Open Window: An exchange of Macintosh discoveries Farber, Daniel

Macworld , Sep/Oct 1984 , v1 n4 p114-119, 5 Pages ISSN: 0741-8647 OPEN WINDOW column contains tips on quicker key caps, paint type, pasting the calculator, turning the pencil into the pen, spreadsheet tabs, drawing circles larger than the drawing screen, more secret characters, creating a screen map, recovering files, saving printer paper, a paper clip fix, type-selecting the Mini-Finder, and more space saving. Seven illustrations.

?t 32/7/2-3

32/7/2 (Item 1 from file: 256)

DIALOG(R)File 256:SoftBase:Reviews,Companies & Prods.

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01015303 DOCUMENT TYPE: Directory

PRODUCT NAME: RoboCAD 4 (015303)

Robo Systems International Inc 408 S State St Newtown, PA 18940 (610) 579-1344 CONTACT: Williams Pres, C R

RoboCAD 4 is a full-featured computer aided drafting program. All functions are accessed through pull-down menus and pop-up windows with icon selection of options. A unique, pictorial-index library scheme is available. It allows the storage and retrieval of drawings via microfiche miniatures of the drawing itself. A wide range of input and output devices is supported, and users can write their own drivers for virtually all other input/output devices. Keyboard numerical data input can use addition, multiplication, avoid the need of using a calculator . Automatic conversion etc. between metric, inch, feet and feet/inch units (both decimal fractional) is provided. The system includes an automatic link to the RoboSOLID solid modeling package. Bi-directional interfaces to many other systems are supported. The software provides continuous numerical feedback. All changes in line length, arc radius, sweep angle, etc., are dynamically reported. All drawing elements, even fillets, arcs and circles, are rubberbanded, changing in size and position as the user moves the mouse <u>digitizing</u> device. Lines, arcs, circles, even pre-drawn symbols from the library, can all be positioned and scaled in real time, without input. The program can produce different line weights multi-stroking, that is, repeated passes with a single <u>pen</u>. RoboCAD 4 includes curves, parallels, three drawing pages, group editing, enhanced text and dimensioning. Hercules compatible or EGA or higher resolution video; 640K RAM required

32/7/3 (Item 2 from file: 256)
DIALOG(R)File 256:SoftBase:Reviews,Companies & Prods.
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01012592 DOCUMENT TYPE: Directory

PRODUCT NAME: TModel2 2.0 (012592)

TModel Corp PO Box 1850 Vashon, WA 98070 (800) 826-6335

CONTACT: Shull Pres, Robert

TModel2 2.0 is a transportation modeling and planning package for regional, subregional corridor and site impact analysis. It features user-friendly, menu-driven, powerful entry/edit routines, support utilities and services. A standard Interactive Screen Graphics for entry display and checking is Interactive Screen Graphics for entry display and checking is included. The system features dynamic node modeling for modeling the impacts of intersections including signals and stop signs. Turn penalties are also dynamically calculated. Trip distribution can be recalculated each increment or iteration to more realistically simulate true operation. The software includes the IMS gravity model which accounts for reduced auto travel at shorter trip distances. It also includes select zone, select link and mode split. Turn movement data can be passed to NCAP (included in the program) for intersection capacity analysis. Powerful post simulation run analysis tools include Screen Graphics Editor/Reporter which allows Enter/Edit, Insert, Delete, Buffer and display by color and width. The system interfaces directly to dot-matrix, laser printer or \_pen -plotter devices. The network calculator allows for user-entered equations to compute cumulative delays, measures of effectivness, summary statistics, etc. Utilities include trip length frequency distribution analysis, external zone calibration, digitizer inputs, auto link distance <u>calculator</u> and renumbering. 400K RAM required?